

## Santa Monica National Estuary Program

November 1, 2017

- One of 28 National Estuary Programs (CWA Section 320).
- 6 West Coast NEPS.
  - R10- Puget Sound, Lower Columbia River, Tillamook Estuaries.
  - R9 - San Francisco Estuary, Morro Bay, Santa Monica Bay.
- SMBNEP started in 1988 as the Santa Monica Restoration Project based at LARWQCB.
- Currently comprised of multiple entities- Santa Monica Bay Restoration Commission (SMBRC), Santa Monica Bay Restoration Authority (SMBRA), and The Bay Foundation (TBF).
- Center for Santa Monica Bay Studies established at Loyola Marymount University (LMU) Fred Seaver College of Science and Engineering in 2005 to assist in research targeting Santa Monica Bay.
- Two physical locations: LMU and RB4.

### SMBNEP and EPA:

- Guiding document is the “Bay Restoration Plan” (Comprehensive Conservation and Management Plan) guiding document lasted updated in 2013 and to be revised by 2019.
- The Bay Foundation receives ~\$600,000/year to plan and implement. Leverage funding ~17:1.
- EPA funding provides: administration, communication, project development, project implementation, supplies and travel.
- Governing Board of Santa Monica Bay Restoration Commission and EPA together approve changes to the Bay Restoration Plan and annual workplans. The Commission, which receives no state funding, is currently chaired by Enrique Zaldivar Director of City of Los Angeles Bureau of Sanitation. There are 35 members in total comprised of federal and state agencies, state and local elected officials and local agencies. EPA is a non-voting member.

**Program Priorities and Activities:** Continuing implementation of core programs are under way which include: Aquatic Resource Restoration, Clean Bay Restaurants Program, Boater Education Program, and LID/Prop 84 projects. In addition, a major revision to the Bay Restoration Plan (BRP) is underway to better address current conditions and needs (including program structure & governance), and to comply with EPA guidelines. The first of several workshops to revise the plan was held in October 2017 to gather input from the SMBRC Governing Board. A draft final plan is expected in October 2018 for EPA concurrence.

**Aquatic Resource Restoration:** The SMBNEP is leading several restoration efforts in the Santa Monica Bay watershed including kelp, abalone, dune and beach, creek, and wetlands.

- **Kelp Forestation:** SMBNEP has restored 40 acres of kelp forest by reducing the density of purple sea urchins to 2/sq. meter within the boundaries of sea urchin barrens on the Palos Verdes Peninsula. Removing urchins allows for recruitment and development of giant kelp and other species of macroalgae and restores biogenic habitat to rocky reefs that historically supported kelp forests. SMBNEP in partnership with several universities in studying how restored kelp forests influence temperature, stratification, mixing, sediment transport, currents, ocean acidification and the attenuation of wave energy.
- **Abalone Restoration:** Since 2011, SMBNEP is working with NOAA, NMFS, UCSB and others to reintroduce and restore native abalone populations. Abalone are a natural predator of the purple sea urchin, and were once abundant along the California Coast, but populations have been impacted by

habitat loss, Withering Syndrome disease, and commercial and recreational fishing resulting in the 1997 closure of the abalone fishery. In 2016, SMBNEP built a lab at the Southern California Marine Institute to study captive abalone spawning and broodstock conditioning. The major goal of the abalone project is to outplant abalone into the wild at a density that will allow reproduction to occur naturally.

- **Dune and Beach Restoration:** SMBNEP is promoting and implementing comprehensive sediment management and other "soft" and "living" measures to address the impact of sea level rise in the beach and adjacent ecosystems of the Bay. SMBNEP is working with the City of Santa Monica to restore 3 acres of coastal strand beach habitat, and LAX to restore 48 of 300+ acres of dune habitat- the largest contiguous parcel of dune habitat in Southern California.
- **Wetland and Creek Restoration:** SMBNEP, in partnership with California Department of Parks and Recreation (CDPR), restored 13 acres of the 31-acre shallow water estuary at Malibu Lagoon in 2013. They are conducting post-restoration monitoring. Further north along the coast, SMBNEP worked with CDPR in 2016 to remove three fish barriers along Arroyo Sequit Creek opening 4.5 miles of creek habitat for southern steelhead. SMBNEP has a community restoration program at Ballona Wetlands, removing non-native species (primarily ice plant). USCOE and CDFW recently released a EIS/EIR for the Ballona Wetlands Restoration Project proposed on approximately 566 acres, most of which is held in fee by the State of California as part of the Ballona Wetlands Ecological Reserve. The draft EIR/EIS is out for public comment until February 2018.
- **Community Engagement:** SMBNEP brings community members to Ballona, LAX dunes, Santa Monica beach and other locations on about a monthly basis to further restoration in the watershed. The SMBNEP Watershed Advisory Council periodically meets to facilitate public input on program activities.

**Boater Education Program:** SMBNEP staff provide peer-to-peer education and outreach, and mobile pump outs at local marinas to educate the boating community on proper waste disposal.

**Clean Bay Restaurant Certification Program:** SMBNEP staff are working with storm water staff in 11 communities to implement the Clean Bay Restaurant Certification Program. Currently the 350 participating restaurants follow key practices to reduce pollutants flowing to Santa Monica Bay including proper waste management, water conservation, equipment and outdoor cleaning, grease handling and spill disposal, and education and training for employees. Starting in 2018, SMBNEP will begin a source reduction pilot with 1-3 restaurants funded by an additional \$25,000 from EPA HQ under the Trash Free Waters program.

**Green Infrastructure:** In FY17 the SMBRC Governing Board recommended five new projects for \$9 million in funding through Prop 84 via the State Water Resources Control Board (SWRCB). These projects, as follows, will assist responsible agencies in meeting the requirements of the new Los Angeles County MS4 Permit:

- **Culver Boulevard Realignment and Stormwater Infiltration/Retention Regional Project:** The system will include a below ground infiltration/retention basin situated underneath Culver Blvd. median, capable of capturing/treating the 85th percentile, 24-hour design storm runoff from a drainage area of 800 acres and capture 100% of the dry weather flow from its drainage area. Project lead: City of Culver City.
- **Westwood Neighborhood Greenway Project:** The project will divert and capture dry-weather flow from a stormdrain that captures runoff from 2,400 acres of drainage area into two parallel bioswales to

improve water quality in the receiving waters (Sepulveda Channel, Ballona Estuary and Santa Monica Bay Beaches). The project is expected to capture 67,000 to 340,000 gallons per day of urban runoff. During storm events, this 5-acre project will capture the "first flush" of the storm from a 2,400-acre drainage area. Project lead: City of Los Angeles.

- **Santa Monica Bay Catch Basin Insert Project:** The project will retrofit Connector Pipe Screen (CPS) units in as many as 1,368 catch basins in three cities in the Palos Verdes Peninsula Watershed. They include the Cities of Rancho Palos Verdes, Palos Verdes Estates, and Rolling Hills Estates. The portion of the Peninsula WMG that drains to Santa Monica Bay consists of approximate 14 sq. miles. Project lead: City of Rancho Palos Verdes.
- **Ladera Park Water Quality Enhancement Project:** Through a combination of pre-treatment, retention, and infiltration facilities, the project will treat then store and infiltrate the 85th percentile 24-hour storm volume of 5.1 acre-feet of stormwater runoff and all the non-stormwater runoff from the 110-acre tributary area. Project lead: County of Los Angeles Department of Public Works.
- **Gates Canyon Park Project:** The project is located at an 8.2-acre park space located within the upper Malibu Creek Watershed. The Project will divert runoff from an existing storm drain to a proposed underground detention gallery and capture up to the 85th percentile storm from 105 acres of single family residential property tributary to this project, and provide infiltration as well as water storage capacity through a gallery below the park's open space. The stored water will be utilized to irrigate Gates Canyon Park during the dry season. Project lead: County of Los Angeles Department of Public Works.

